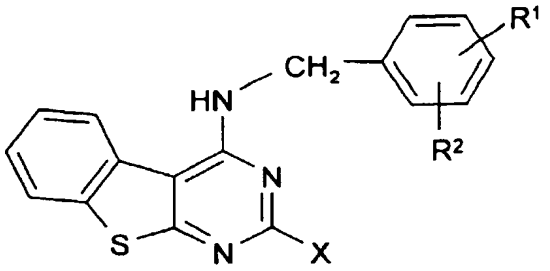
The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound of ~~Compounds of the~~ formula I or a physiologically acceptable salt thereof



I

in which

R^1, R^2	in each case independently of one another are H, A, OH, OA or Hal,
X	is R^4, R^5 or R^6, which is monosubstituted by R^7,
R^4	is linear or branched alkylene having 1-10 C atoms, in which one or two CH_2 groups are optionally ~~can be~~ replaced by -CH=CH- groups,
R^5	is cycloalkyl or cycloalkyl alkylene having 5-12 C atoms,
R^6	is phenyl or phenylmethyl,
R^7	is COOH, COOA, $CONH_2$, CONHA, $CON(A)_2$ or CN,
A	is alkyl having 1 to 6 C atoms and
Hal	is F, Cl, Br or I,

where at least one of the radicals R^1 or R^2 is OH~~,~~

~~and their physiologically acceptable salts~~.

2. (Currently Amended) A compound of ~~Compounds of the~~ formula I according to Claim 1, that is

(a) 3-[4-(3-chloro-4-hydroxybenzylamino)benzo[4,5]thieno[2,3-d]pyrimidin-2-yl]propionic acid;

(b) 7-[4-(3-chloro-4-hydroxybenzylamino)benzo[4,5]thieno[2,3-d]pyrimidin-2-yl]heptanoic acid;

(c) 5-[4-(3-chloro-4-hydroxybenzylamino)benzo[4,5]thieno[2,3-d]pyrimidin-2-yl]valeric acid;

(d) 2-{4-[4-(3-chloro-4-hydroxybenzylamino)benzo[4,5]thieno[2,3-d]pyrimidin-2-yl]cyclohex-1-yl}acetic acid; or

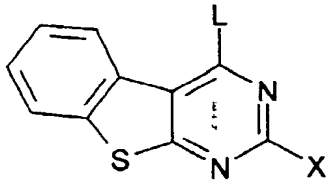
(e) 4-[4-(3-chloro-4-hydroxybenzylamino)benzothieno[2,3-d]pyrimidin-2-yl]cyclohexanecarboxylic acid; or

a physiologically acceptable salt thereof ~~and their physiologically acceptable salts~~.

3. (Currently Amended) A process for preparing a compound of ~~Process for the preparation of compounds of the~~ formula I according to Claim 1 or a salt thereof comprising ~~and their salts,~~

~~characterized in that~~

a) reacting a compound of ~~the~~ formula II



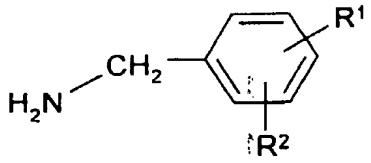
II

in which

X has the meaning indicated in claim 1,

and L is Cl, Br, OH, SCH_3 or a reactive esterified OH group,

~~is reacted~~ with a compound of ~~the~~ formula III



III

in which

R^1 and R^2 have the meanings indicated in claim 1,

or

b) in a compound of the formula I, a radical X ~~is converted into another radical X by hydrolysing an ester group~~ that is an ester group is hydrolyzed to a COOH group or ~~converting~~ a radical X that is a COOH group is reacted to form into an amide or into a cyano group

or

c) in a compound of the formula I, a radical R^1 and/or R^2 which are alkoxy groups are reacted to form ~~is converted into another radical R^1 and/or R^2 by converting an alkoxy group~~ into a hydroxyl group, or

~~and/or~~ a compound of ~~the~~ formula I is reacted with an acid or a base to form a salt of a compound of formula I ~~converted into one of its salts~~.

4. (Currently Amended) A process for preparing a ~~Process for the production of~~ pharmaceutical composition comprising bringing together ~~preparations, characterized in that~~ a compound of ~~the~~ formula I according to Claim 1 or a physiologically acceptable salt thereof ~~and/or one of its physiologically acceptable salts is brought into a suitable dose form together~~ with ~~at least one~~ a solid, liquid or semi-liquid vehicle or excipient.

5. (Currently Amended) ~~Pharmaceutical preparation, characterized in that it contains at least one compound of the~~ A pharmaceutical composition comprising a compound of formula I according to Claim 1 or a physiologically acceptable salt thereof and a solid, liquid or semi-liquid vehicle or excipient ~~and/or one of its physiologically acceptable salts~~.

6. (Currently Amended) A method for controlling a disease of the cardiovascular system comprising administering a pharmaceutical composition according to claim 5 to a patient in need thereof ~~Compounds of the formula I according to Claim 1 and their physiologically acceptable salts for the control of diseases of the cardiovascular system and for the treatment and/or therapy of potency disorders~~.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (New) A method of inhibiting phosphodiesterase V comprising administering a compound of formula I according to Claim 1 or a physiologically acceptable salt thereof to a patient in need thereof.

11. (New) A method of inhibiting phosphodiesterase V in vitro comprising bringing together a compound of formula I according to Claim 1 or a physiologically acceptable salt thereof with phosphodiesterase V.

12. (New) A method for the treatment or therapy of cardiac insufficiency comprising administering a pharmaceutical composition according to claim 5 to a patient in need thereof.

13. (New) A method for the treatment or therapy of erectile dysfunction comprising administering a pharmaceutical composition according to claim 5 to a patient in need thereof.

14. (New) A pharmaceutical composition comprising a compound of Claim 2 or a physiologically acceptable salt thereof and a solid, liquid or semi-liquid vehicle or excipient

15. (New) A method for controlling a disease of the cardiovascular system comprising administering a pharmaceutical composition according to claim 14 to a patient in need thereof.

16. (New) A method of inhibiting phosphodiesterase V comprising administering a compound of formula I according to Claim 2 or a physiologically acceptable salt thereof to a patient in need thereof.

17. (New) A method of inhibiting phosphodiesterase V in vitro comprising bringing together a compound of formula I according to Claim 2 or a physiologically acceptable salt thereof with phosphodiesterase V.

18. (New) A method for the treatment or therapy of cardiac insufficiency comprising administering a pharmaceutical composition according to claim 14 to a patient in need thereof.

19. (New) A method for the treatment or therapy of erectile dysfunction

comprising administering a pharmaceutical composition according to claim 14 to a patient in need thereof.

20. (New) A method for the treatment or therapy of a potency disorder comprising administering a pharmaceutical composition according to claim 5 to a patient in need thereof

21. (New) A method for the treatment or therapy of a potency disorder comprising administering a pharmaceutical composition according to claim 14 to a patient in need thereof

22. (New) A compound of formula I according to Claim 1 or a physiologically acceptable salt thereof, wherein X is R^4 or R^6.

23. (New) A compound of formula I according to Claim 1 or a physiologically acceptable salt thereof, wherein X is alkylene having 2-5 C atoms, cyclohexyl, phenyl or phenylmethyl, and R^7 is COOH or COOA.

24. (New) A compound of formula I according to Claim 23 or a physiologically acceptable salt thereof, wherein R^1 is Hal, and R^2 is OH.